Please provide the following information, and submit to the NOAA DM Plan Repository.

# Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

# 1. General Description of Data to be Managed

# 1.1. Name of the Data, data collection Project, or data-producing Program:

North Carolina 2016 ESI INVERT Polygons, Points

### 1.2. Summary description of the data:

This data set contains sensitive biological resource data for marine, estuarine, and freshwater invertebrates, and federally and/or state endangered, threatened, or rare insects. Vector polygons (INVERT POLYS) and points (INVERT POINTS) in this data set represent invertebrate distributions, spawning areas, migration areas, concentration areas, and harvest areas. Species-specific abundance, seasonality, status, life history, and source information are stored in associated data tables (described below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for North Carolina. As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

# **1.3.** Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

#### 1.4. Actual or planned temporal coverage of the data:

2014 to 2016

## 1.5. Actual or planned geographic coverage of the data:

W: -78.6308, E: -75.2142, N: 36.5819, S: 33.6182

This reflects the extent of all land and water features included in the overall North Carolina ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

## 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

#### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy,

research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

# 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

## 1.8.1. If data are from another observing system, please specify:

## 2. Point of Contact for this Data Management Plan (author or maintainer)

#### 2.1. Name:

ESI Program Manager

## 2.2. Title:

Metadata Contact

# 2.3. Affiliation or facility:

#### 2.4. E-mail address:

orr.esi@noaa.gov

#### 2.5. Phone number:

## 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

## 3.1. Name:

ESI Program Manager

#### 3.2. Title:

Data Steward

# 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

# 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

# 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

**Process Steps:** 

- 2016-11-01 00:00:00 - Invertebrates depicted in this feature class include selected marine and estuarine species of commercial, recreational, ecological, and/or conservation interest. Several known invertebrate concentrations, as well as larger, more general areas where invertebrate habitat exists, are included. Most rare and endangered invertebrates included in this feature class were mapped using NCNHP data. These species include freshwater bivalves, insects, and one crayfish species. One of these insects is a recently-discovered butterfly, the crystal skipper (federal species of concern), that is restricted to 30 miles of barrier island habitat in North Carolina. Crystal skipper locations were clipped to land. The monarch butterfly, a federal candidate species, also occurs along the North Carolina coast, particularly during the fall migration, but has not been observed roosting in predictable locations or in large concentrations and thus was not mapped. Freshwater bivalves included in the atlas consist of the alewife floater (state threatened), barrel floater ( state endangered), Cape Fear spike (state species of concern), eastern lampmussel ( state threatened), eastern pondmussel (state threatened), tidewater mucket (state threatened/federal species of concern), and Waccamaw spike (state endangered/ federal species of concern). The NHP locations of these aquatic species, along with the Chowanoke crayfish (state species of concern) and giant swallowtail were modified to be congruent with ESI water polygon and line features and wetland polygons. Marine invertebrates mapped in this atlas include blue crab, florida stone crab, white shrimp, brown shrimp, pink shrimp, bay scallop, hard clam, and eastern oyster. Blue crab, white shrimp, brown shrimp, pink shrimp, and eastern oyster are of high commercial value in North Carolina. According to the NCDMF, combined landings of these species in 2015 was approximately 42 million lbs. Bay scallop abundance in North Carolina is considered low and the current NCDMF stock status is "concern". Harvest of this species was not allowed 2006 through 2008, and in 2016 the main harvest season was not opened in many regions of the state ( NCDMF). Florida stone crabs are associated with shell bottom in North Carolina and thus were mapped using the "Estuarine Benthic Habitat Mapping" dataset (North Carolina Division of Marine Fisheries 2013). See the Lineage section for additional information on the type of source data for this data layer. The ESI, biology, and human-use data are compiled into the standard ESI digital data format. A second set of interviews with participating resource experts are conducted to review the compiled data. If necessary, edits to the INVERT POLYS and POINTS data layers are made based on the recommendations of the resource experts and digital data are created.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other

plan:

## 5.2. Quality control procedures employed (describe or provide URL of description):

#### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

# 6.1. Does metadata comply with EDMC Data Documentation directive?

No

# 6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

## 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

# 6.2.1. If service is needed for metadata hosting, please indicate:

# 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/40431

# 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

- 7.1. Do these data comply with the Data Access directive?
  - 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?
  - 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:
- 7.2. Name of organization of facility providing data access:
  - 7.2.1. If data hosting service is needed, please indicate:
  - 7.2.2. URL of data access service, if known:

https://response.restoration.noaa.gov/esi\_download

#### 7.3. Data access methods or services offered:

Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).

- 7.4. Approximate delay between data collection and dissemination:
  - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

#### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

## 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2. Data storage facility prior to being sent to an archive facility (if any):**Office of Response and Restoration Seattle, WA
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

# 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.